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EXAMINER
MANNING, JOHN

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Office Action Summary	Application No.	Applicant(s)
		09/751,159	KAPLAN ET AL.
		Examiner	Art Unit	
		John Manning	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>10/07/04</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments, see page 9, filed 10/07/2004, with respect to the objection

to claim 6 have been fully considered and are persuasive. The objection of claim for

having insufficient antecedent basis has been withdrawn.

2.   Applicant's arguments filed 10/07/2004 have been fully considered but they are

not persuasive. The applicant argues "that Simonin does not disclose or suggest the

deliverance of a video signal via a "switched communication network," as is required by

claims 1-5, 10- 15 and 19-22 of the present invention. Instead, Simonin discloses the

transmission of signals over a cable television system which is not a switched

communication network." Simonin is directed toward a telecommunication system,

which clearly utilizes ring switches for providing a packetized Ethernet network with

TCP/IP error correction. Ethernet networks are switched communication networks. The

applicant's specification on page 3 refers to Ethernet while discussing a switched

network.

The applicant argues, "that neither Simonin nor Wilkins, taken separately or in

combination, discloses or suggests the insertion of "N x M ad-inserted streams" for

delivery to individual subscribers as is required by claims 5 and 15 of the present

invention." Wilkins discloses creating psychographic and demographic audience

groups. The number of modified steams would be equal to the number of channels

multiplied by the number of audience groups.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-5, 10-15 and 19-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Simonin (US Pat 6,049,824) in view of Wilkins (US Pat No

5,446,919).

In regard to claim 1, the Simonin reference discloses a system and method

modifying an information signal in a telecommunications system. The claimed method

is met by Figure 1. The claimed step of "transmitting one or more program streams

from a head end node to one or more egress nodes via the switched network" is met by

Items 102, 108-1, and 104-1 of Figure 1. "Head end 102 includes a number of

transceivers 110 that receive information signals from content providers via, e.g., wired,

satellite or other wireless feeds at antenna 112. Transceivers 110 transmit the

information signals in a number of channels over the transport system to remote head

ends 104-1 through 104-N" (Col 4, Lines 13-18). The claimed step of "inserting one or

more advertisements into the one or more program streams at the one or more egress

nodes for delivery to individual subscribers such that a particular subscriber receives a

program stream with an advertisement that corresponds to demographic characteristics

of that particular subscriber" is met in part by the remote head end 104-1 of Figure 1.

The disclosed system "allows an information signal provided from head end 102 to be

selectively modified at one or more of remote head ends 104-1 through 104-N" (Col 3, Lines 48-50). It is noted that the examiner interprets the disclosed "main head end" to be the "head end" and the "remote head end" to be the "egress node". The reference fails to explicitly disclose that the advertisement corresponds to demographic characteristics of that particular subscriber. The Wilkins teaches the analysis of demographic information so as to guarantee a well-defined audience to the advertisers. Consequently, it would have been obvious to one of ordinary skill in the art to modify Simonin with the analysis of demographic information so as to guarantee a well-defined audience to the advertisers.

In regard to claim 2, the claimed step of "inserting splice points in the one or more program streams at the head end node" is met by the main head end 102 of the Simonin reference. "Head end 102 is programmable to indicate the time that a particular information signal is to be modified with a particular modification signal. The transmission of a selected modification signal is based on a pulse signal from, for example, a satellite feed" (Col 4, Lines 21-23).

In regard to claim 3, the claimed step of "inserting one or more advertisements comprises splicing an advertising stream with a program stream, wherein the advertising stream includes the one or more advertisements" is met by the "node" or remote head end 104-1. The disclosed system "allows an information signal provided from head end 102 to be selectively modified at one or more of remote head ends 104-1 through 104-N" (Col 3, Lines 48-50). Further, "Upon detecting a base band output from decoder card 120-1, switch 122-1 switches to output the base band signal from decoder

card 120-1 in place of the information signal or in conjunction with the information signal

when a blanking pulse is detected in the information signal" (Col 5, Lines 41-45).

In regard to claim 4, the claimed step the system "responsive to a command to

begin splicing, identifying a splice point in the advertising stream" is met by Figure 1.

"Head end 102 is programmable to indicate the time that a particular information signal

is to be modified with a particular modification signal. The transmission of a selected

modification signal is based on a pulse signal from, for example, a satellite feed" (Col 4,

Lines 21-25). The claimed step of "buffering frames after the splice point in the

advertising stream" is met by decoder card 120-1. The "decoder cards 120-1 through

120-M include a buffer circuit that is adjustable from, for example, 0 to at least 2

seconds to allow for real time error correction of the modification signal transmitted over

the transport system to the remote head end" (Col 5, Lines 11-15). The claimed step of

"identifying a splice point in the program stream" is met by decoder card 120-1 and

switch 122-1. "The pulse causes server 114 to transmit the selected modification signal

through ring switches 116 and 118 to decoder card 120-1. The modification signal is

transmitted in packets with an address that indicates the packets are destined for

decoder card 120-1." (Col 5, Lines 41-45). The claimed step of "switching to the

advertising stream" is met by decoder card 120-1 and switch 122-1. "Remote head end

104-1 also includes switches 122-1 through 122-M. Switches 122-1 through 122-M each

receive information signals from head end 102 over the transport system. Further, each

switch 122-1 through 122-M has a second input that is coupled to an output of a

corresponding decoder card 120-1 through 120-M." The claimed step of "outputting an

ad-inserted stream that includes frames from the program stream and advertising

stream, whereby the program stream and advertising stream are adaptively

synchronized by aligning the splice points to enhance the quality of video transmission"

is met by decoder card 120-1 and switch 122-1. "Decoder card 120-1 decodes the

modification signal down to a base band signal. Upon detecting a base band output

from decoder card 120-1, switch 122-1 switches to output the base band signal from

decoder card 120-1 in place of the information signal or in conjunction with the

information signal when a blanking pulse is detected in the information signal. Switch

122-1 switches back to the information signal when the absence of a base band signal

is detected at the output of decoder card 120-1" (Col 5, Lines 40-48).

In regard to claim 5, it is implied that N x M ad inserted streams are created,

where M represents the number of demographic groupings and N represents the

unmodified streams.

In regard to claim 10, the claimed step of "the program streams supplied by the

head end node include program streams provided to the head end node from a remote

source" is met by Figure 1, Items 102 and 112. "Head end 102 includes a number of

transceivers 110 that receive information signals from content providers via, e.g., wired,

satellite or other wireless feeds at antenna 112" (Col 4, Lines 13-15).

In regard to claim 11, Wilkins discloses the step of "receiving subscriber

management information". "The cable television head-end receives the

demographic/psychographic information, and identifies data pertaining to subscribers of

that particular cable system" (Col 9, Lines 31-34). Wilkins discloses the step of

"selecting a particular advertisement based on the subscriber management information".

The system compares "the household's demographic/psychographic information to the

selection profile and switch to the appropriate viewing channel" (Col 10, Lines 8-10).

Simonin discloses the step of "retrieving the particular advertisement at the one or more

egress nodes". "System 100 can be used to allow the operator of a local cable

television system selectively to insert local advertisements into the feed from a

nationally broadcast channel. This is accomplished by selectively providing modification

signals over one of the channels of the transport system in packets that are switched to

a selected remote head end using ring switches which learn the location of network

devices" (Col 3, Lines 58-64).

In regard to claim 12, the Simonin reference discloses a system and method

modifying an information signal in a telecommunications system where the information

signals are supplied to a "node" or remote head end from a main head end. The

claimed limitation of an "egress node" is met by the remote head end 104-1. The

claimed limitation of "a router for receiving the one or more program streams" is met by

the ring switch 118. "This is accomplished by selectively providing modification signals

over one of the channels of the transport system in packets that are switched to a

selected remote head end using ring switches which learn the location of network

devices, e.g., addressable components of a remote head end, based on addresses in

packets processed by the switches and which learn that addresses of network devices

associated with other ring switches are reachable out of at least one ring port of the ring

switch" (Col 3, Lines 61-67; Col 4, Lines 1-2). The claimed limitation of "a storage

element for storing advertisements" is met by the decoder card 120. "In one embodiment decoder cards 120-1 through 120-M include a buffer circuit that is adjustable from, for example, 0 to at least 2 seconds to allow for real time error correction of the modification signal transmitted over the transport system to the remote head end" (Col 5, Lines 9-15). The claimed limitation of "a splicer element for inserting one or more of the stored advertisements into the one or more program streams for delivery to individual subscribers" is met by the decoder card 120. "Decoder card 120-1 decodes the modification signal down to a base band signal. Upon detecting a base band output from decoder card 120-1, switch 122-1 switches to output the base band signal from decoder card 120-1 in place of the information signal or in conjunction with the information signal when a blanking pulse is detected in the information signal" (Col 5, Lines 40-45). The reference fails to explicitly disclose that the advertisement corresponds to demographic characteristics of that particular subscriber. The Wilkins teaches the analysis of demographic information so as to guarantee a well-defined audience to the advertisers. Consequently, it would have been obvious to one of ordinary skill in the art to modify Simonin with the analysis of demographic information so as to guarantee a well-defined audience to the advertisers.

In regard to claim 13, the claimed limitation of "one or more program streams include splice points and wherein the splicer element splices an advertising stream with a program stream, wherein the advertising stream includes one or more stored advertisements" is met by the main head end 102 and the remote head end 104 of the Simonin reference. "Head end 102 is programmable to indicate the time that a

particular information signal is to be modified with a particular modification signal. The

transmission of a selected modification signal is based on a pulse signal from, for

example, a satellite feed" (Col 4, Lines 21-23). The disclosed system "allows an

information signal provided from head end 102 to be selectively modified at one or more

of remote head ends 104-1 through 104-N" (Col 3, Lines 48-50). Further, "Upon

detecting a base band output from decoder card 120-1, switch 122-1 switches to output

the base band signal from decoder card 120-1 in place of the information signal or in

conjunction with the information signal when a blanking pulse is detected in the

information signal" (Col 5, Lines 41-45). The limitation "stored advertisements" is met

by the decoder card 120. In one embodiment decoder cards 120-1 through 120-M

include a buffer circuit that is adjustable from, for example, 0 to at least 2 seconds to

allow for real time error correction of the modification signal transmitted over the

transport system to the remote head end.

In regard to claim 14, the claimed limitation of "a plurality of input processors" is

met by the decoder cards 122-1-122-M. The claimed limitation of "a plurality of data

buffers, each of the plurality of data buffers coupled to a corresponding one of the

plurality of input processors" is also met by the decoder cards 122-1-122-M. "In one

embodiment decoder cards 120-1 through 120-M include a buffer circuit that is

adjustable from, for example, 0 to at least 2 seconds to allow for real time error

correction of the modification signal transmitted over the transport system to the remote

head end" (Col 5, Lines 9-15). The claimed limitation of "responsive to a splice point

being identified in the advertising stream, one of the plurality of data buffers stores

frames after the splice point in the advertising stream, and wherein, responsive to a

splice point being identified in the program stream, the at least one output processor

switches to the advertising stream so that a single bitstream is provided as output that

includes frames from the program stream and advertising stream" is met bt the decoder

card 120. "Upon detecting a base band output from decoder card 120-1, switch 122-1

switches to output the base band signal from decoder card 120-1 in place of the

information signal or in conjunction with the information signal when a blanking pulse is

detected in the information signal" (Col 5, Lines 41-45).

In regard to claim 15, it is implied that N x M ad inserted streams are created,

where M represents the number of demographic groupings and N represents the

unmodified streams.

In regard to claim 19, Wilkins discloses the step of "receiving subscriber

management information". "The cable television head-end receives the

demographic/psychographic information, and identifies data pertaining to subscribers of

that particular cable system" (Col 9, Lines 31-34). Wilkins discloses the step of

"selecting a particular advertisement based on the subscriber management information".

The system compares "the household's demographic/psychographic information to the

selection profile and switch to the appropriate viewing channel" (Col 10, Lines 8-10).

Simonin discloses the step of "retrieving the particular advertisement at the one or more

egress nodes". "System 100 can be used to allow the operator of a local cable

television system selectively to insert local advertisements into the feed from a

nationally broadcast channel. This is accomplished by selectively providing modification

signals over one of the channels of the transport system in packets that are switched to

a selected remote head end using ring switches which learn the location of network

devices" (Col 3, Lines 58-64).

In regard to claim 20, the claimed limitation of "a head end node for transmitting

one or more program streams via the switched network" is met by the main head end

102. The claimed limitation of "at least one egress node for receiving the one or more

program streams" is met by remote head ends 104-1-104-N. The claimed limitation of

"the egress node including a splicer element for inserting one or more advertisements

into the one or more program streams at the egress node for delivery to individual

subscribers" is met by the main head end 102 and the remote head end 104 of the

Simonin reference. "Head end 102 is programmable to indicate the time that a

particular information signal is to be modified with a particular modification signal. The

transmission of a selected modification signal is based on a pulse signal from, for

example, a satellite feed" (Col 4, Lines 21-23). The disclosed system "allows an

information signal provided from head end 102 to be selectively modified at one or more

of remote head ends 104-1 through 104-N" (Col 3, Lines 48-50). Further, "Upon

detecting a base band output from decoder card 120-1, switch 122-1 switches to output

the base band signal from decoder card 120-1 in place of the information signal or in

conjunction with the information signal when a blanking pulse is detected in the

information signal" (Col 5, Lines 41-45). The limitation "stored advertisements" is met

by the decoder card 120. In one embodiment decoder cards 120-1 through 120-M

include a buffer circuit that is adjustable from, for example, 0 to at least 2 seconds to

allow for real time error correction of the modification signal transmitted over the transport system to the remote head end. The Simonin reference fails to explicitly disclose the claimed limitation "that a particular subscriber receives a program stream with an advertisement that corresponds to demographic characteristics of that particular subscriber". The Wilkins teaches the analysis of demographic information so as to guarantee a well-defined audience to the advertisers. Consequently, it would have been obvious to one of ordinary skill in the art to modify Simonin with the analysis of demographic information so as to guarantee a well-defined audience to the advertisers.

In regard to claim 21, "an encoder for receiving and encoding the program streams" is met by transceiver 110. "Transceivers 110 transmit the information signals in a number of channels over the transport system to remote head ends104-1 through 104-N" (Col 4, Lines 16-18). Encapsulation of the received program stream is implied. The Simonin reference discloses a service management system for provisioning and managing distribution of the program streams; and, Wilkins discloses analysis of demographic information so as to guarantee a well-defined audience to the advertisers.

In regard to claim 22, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the head end node comprises a storage element for encoded program streams for time-delay delivery. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to have a storage element at the head end for encoded program streams for time-delay delivery as for the case of video-on-demand for increased functionality.

Consequently, it would have been obvious to on of ordinary skill in the art to modify the combination of Simonin and Wilkins with streams that are transmitted to the subscriber via a DSL interface so that the subscriber may connect to the network using existing telephonic infrastructure.

5.   Claims 6-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simonin in view of Wilkins and further in view of Bigham et al. (US Pat No 5,544,161).

In regard to claim 6, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the distributed packets are over an ATM-based network. Bigham teaches the use of an ATM-based network so as to provide a network with "broad-bandwidth, low delay, packet-like switching and multiplexing". Consequently, it would have been obvious to one of ordinary skill in the art to modify the combination of Simonin and Wilkins with an ATM-based network so as to provide a network with "broad-bandwidth, low delay, packet-like switching and multiplexing".

In regard to claim 7, Simonin discloses multicasting the program streams via the switched communications network. "The modification signal is transmitted in packets with an address that indicates the packets are destined for decoder card 120-1. It is noted that the address used could correspond to a group of decoder cards located at a number of remote head ends" (Col 5, Lines 35-39).

In regard to claim 8, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the streams are transmitted to the subscriber via a DSL interface. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to use a DSL interface so as to connect to a network using existing telephonic infrastructure. Consequently, it would have been obvious to on of ordinary skill in the art to modify the combination of Simonin and Wilkins with streams that are transmitted to the subscriber via a DSL interface so that the subscriber may connect to the network using existing telephonic infrastructure.

In regard to claim 9, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the streams are transmitted to the subscriber via an Ethernet interface. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to use an Ethernet interface so as to connect to an Ethernet network. Consequently, it would have been obvious to on of ordinary skill in the art to modify the combination of Simonin and Wilkins with streams that are transmitted to the subscriber via an Ethernet interface so as to connect to an Ethernet network.

In regard to claim 16, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the distributed packets

are over an ATM-based network. Bigham teaches the use of an ATM-based network so as to provide a network with "broad-bandwidth, low delay, packet-like switching and multiplexing". Consequently, it would have been obvious to one of ordinary skill in the art to modify the combination of Simonin and Wilkins with an ATM-based network so as to provide a network with "broad-bandwidth, low delay, packet-like switching and multiplexing".

In regard to claim 17, Simonin discloses multicasting the program streams via the switched communications network. "The modification signal is transmitted in packets with an address that indicates the packets are destined for decoder card 120-1. It is noted that the address used could correspond to a group of decoder cards located at a number of remote head ends" (Col 5, Lines 35-39).

In regard to claim 18, the combination of Simonin and Wilkins disclose a system and method modifying an information signal in a telecommunications system. The combination of Simonin and Wilkins fail to explicitly disclose that the streams are transmitted to the subscriber via a DSL interface or Ethernet interface. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to use a DSL interface so as to connect to a network using existing telephonic infrastructure or an Ethernet interface so as to connect to an Ethernet network. Consequently, it would have been obvious to on of ordinary skill in the art to modify the combination of Simonin and Wilkins with streams that are transmitted to the subscriber via either a DSL interface so that the subscriber may connect to the network using existing telephonic infrastructure or an Ethernet interface so as to connect to an Ethernet network.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure as follows:

- The Coden reference (US Pat No 6,154,462) discloses circuits and methods for a

  ring network.

- The Eldering et al. reference (US Pat No 6,820,277) discloses an advertisement

  system for digital video streams.

7.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John Manning whose telephone number is 571-272-

7352. The examiner can normally be reached on M-F: 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

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JM
April 23, 2005

JOHN MILLER
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TECHNOLOGY CENTER 2600